



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/680,280	10/06/2000	David B. Dwyer	H0001181	8489

128 7590 11/19/2002

HONEYWELL INTERNATIONAL INC.  
101 COLUMBIA ROAD  
P O BOX 2245  
MORRISTOWN, NJ 07962-2245

EXAMINER

TRAN, DALENA

ART UNIT	PAPER NUMBER
----------	--------------

3661

DATE MAILED: 11/19/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/680,280

Applicant(s)

DWYER ET AL.

Examiner

Dalena Tran

Art Unit

3661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 16 September 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-48 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

**Notice to Applicant(s)**

1. This office is responsive to the amendment filed on 9/9/02. As per request, claim 48 has been added. Thus, claims 1-48 are pending.

Applicant is required to submit the PTO 1449 for the IDS filed on 4/12/02.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

3. Claims 1-2,11-12,28-29,38-40, and 48, are rejected under 35 U.S.C.102(e) as being anticipated by Deker et al. (6,181,987).

As per claims 1,11, and 28, Deker et al. disclose a navigation system, comprising: a display device that includes a graphical display portion and a textual display portion, and logic that simultaneously presents a textual display of an original flight plan and a modified flight plan on display device (see column 4, lines 36-65; and columns 6-7, lines 44-18).

As per claims 39-40, Deker et al. disclose a display device (see column 5, lines 5-23), logic that simultaneously presents a textual display of comparative data for an original flight plan and a modified flight plan, wherein the comparative data comprises a textlist of waypoints that are on the original flight plan and a modified flight plan, and performance data for common

Art Unit: 3661

waypoints that are both the original flight plan and a modified flight plan (see columns 5-7, lines 23-37).

As per claims 2,12, and 29, Deker et al. disclose the textual display presented by logic comprises a textlist of waypoints that are on the original flight plan and a modified flight plan, and performance data for common waypoints that are both the original flight plan and a modified flight plan (see columns 6-7, lines 44-18; and column 8, lines 1-19).

As per claims 38, Deker et al. disclose a navigation system, comprising: a CPU, and a flight control system that controls an airplane based on inputs from CPU (see the abstract; and column 3, lines 5-29), a display device (see column 2, lines 22-29), logic that simultaneously presents a textual display of an original flight plan and a modified flight plan on display device (see column 4, lines 36-65; and columns 6-7, lines 44-18), wherein CPU provides inputs to flight control system based on navigational data corresponding to the original flight plan that is presented on display device (see column 2, lines 1-21; and lines 30-60).

As per claims 48, Deker et al. disclose a textual display presented by logic comprises a textlist of waypoints that are on the original flight plan and a modified flight plan, and performance data for common waypoints that are both the original flight plan and a modified flight plan (see columns 6-7, lines 44-18; and column 8, lines 1-19).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 3661

5. Claims 3-10,13-17,30-37, and 41-47, are rejected under 35 U.S.C.103(a) as being unpatentable over Deker et al. (6,181,987) in view of Lions (4,086,632).

As per claims 3-4,13-14,30-31, and 41, Deker et al. do not disclose the textual display presented by logic further comprises performance data for waypoints that are added to the modified flight plan. However, Lions discloses the textual display presented by logic further comprises performance data for waypoints that are added to the modified flight plan (see columns 10-11, lines 38-37). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Deker et al. by combining the textual display presented by logic further comprises performance data for waypoints that are added to the modified flight plan for easily to compare the original waypoints so to made a decision as to whether or not the flight plan should be modified.

As per claims 5,15, and 32, Deker et al. disclose an interface device that allows an operator to change the modified flight plan (see column 7, lines 39-53), and logic updates the performance data on the textual display for common waypoints when the modified flight plan is changed (see column 7, lines 54-67).

As per claims 6,16,33, and 43, Deker et al. do not disclose logic designates on the textual display waypoints to be removed. However, Lions discloses disclose logic designates on the textual display waypoints to be removed, which correspond to waypoints that are on the original flight plan but not on the modified flight plan (see columns 7-8, lines 36-51; columns 10-11, lines 62-37; and columns 14-15, lines 42-43). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Deker et al. by combining logic designates on the textual display waypoints to be removed, which correspond to

Art Unit: 3661

waypoints that are on the original flight plan but not on the modified flight plan for updating the new flight plan, and provide a clear view of the flight plan for the operator.

As per claims 7,17,34, and 44, Deker et al. do not disclose modified flight plan is activated to become a new original flight plan. However, Lions discloses modified flight plan is activated to become a new original flight plan, logic removes from the textual display the waypoints that are designated to be removed (see the abstract; and columns 11-12, lines 38-26). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Deker et al. by combining modified flight plan is activated to become a new original flight plan, logic removes from the textual display the waypoints that are designated to be removed for avoiding confusion to the operator and recognize a new flight path.

As per claims 8,35, and 45, Deker et al. do not clearly disclose a graphical display of the original flight plan and the modified flight plan. However, Lions discloses a graphical display of the original flight plan and the modified flight plan is simultaneously presented on display device together with the simultaneously textual display of the original flight plan and the modified flight plan (see columns 11-13, lines 38-43). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Deker et al. by combining a graphical display of the original flight plan and the modified flight plan is also simultaneously presented on display device together with the simultaneously textual display of the original flight plan and the modified flight plan for assisting a pilot in determining a good flight path to follow or modify.

As per claims 9,36, and 46, Deker et al. disclose interface device allows an operator to change the modified flight plan on either the textual display or the graphical display (see column

Art Unit: 3661

1, lines 37-64), and the graphical display of the modified flight plan is updated when the modified flight plan is changed (see column 7, lines 39-67). Deker et al. do not clearly disclose a graphical display of the original flight plan and the modified flight plan. However, Lions discloses a graphical display of the original flight plan and the modified flight plan is simultaneously presented on display device together with the simultaneously textual display of the original flight plan and the modified flight plan (see columns 11-13, lines 38-43). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Deker et al. by combining a graphical display of the original flight plan and the modified flight plan is also simultaneously presented on display device together with the simultaneously textual display of the original flight plan and the modified flight plan for assisting a pilot in determining a good flight path to follow or modify.

As per claims 10,37, and 47, Deker et al. disclose interface device allows an operator to change the modified flight plan on either the textual display or the graphical display (see column 1, lines 37-64), and the graphical display of the modified flight plan is updated when the modified flight plan is changed (see column 7, lines 39-67). Deker et al. do not clearly disclose a graphical display of the original flight plan and the modified flight plan. However, Lions discloses a graphical display of the original flight plan and the modified flight plan is simultaneously presented on display device together with the simultaneously textual display of the original flight plan and the modified flight plan (see columns 11-13, lines 38-43), and when the modified flight plan is activated to become the new flight plan, the graphical display is updated to display only the new original flight plan (see columns 9-10, lines 20-38). It would have been obvious to one of ordinary skill in the art at the time the invention was made to

Art Unit: 3661

modify the teach of Deker et al. by combining when the modified flight plan is activated to become the new flight plan, the graphical display is updated to display only the new original flight plan to avoid unnecessary waypoints left in the screen display to confuse the pilot.

6. Claim 18 is method claim corresponding to system claims 1 and 11 above. Therefore, it is rejected for the same rationales set forth as above.

Claim 19 is method claim corresponding to system claims 2 and 12 above.

Claim 20 is method claim corresponding to system claims 3 and 13 above.

Claim 21 is method claim corresponding to system claims 4 and 14 above.

Claim 22 is method claim corresponding to system claims 5 and 15 above.

Claim 23 is method claim corresponding to system claims 6 and 16 above.

Claim 24 is method claim corresponding to system claims 7 and 17 above.

Claims 25-27 are method claims corresponding to system claims 8-10 above. Therefore, they are rejected for the same rationales set forth as above.

### **Remarks**

7. Applicant's argument filed on 9/16/02 has been fully considered and they are deemed to be persuasive. However, upon updated search, the new ground of rejection has been set forth as above.

Applicant's argue on page 16 of the amendment that Deker does not discloses simultaneous textual display of an active flight plan and a modified flight plan. However, in columns 6-7, lines 66-15, and column 8, lines 6-19, Deker discloses "when pilot press COMPARE button (column 7, lines 1-5), the full screen display of a comparative table of the active flight plan followed by the aerodyne with the flight plan solutions which are



Art Unit: 3661

advantageously classified in an order corresponding to the predetermined or chosen criterion of optimization”; this implies that simultaneous textual display of an active flight plan and a modified flight plan; also, in column 8, lines 13-19, Deker disclose “the textual window gives the parameters of prediction of the active flight plan and the avoidance flight plan as well as the modifiable parameters of the new flight plan, this also implies that simultaneous textual display of an active flight plan and a modified flight plan.

Applicant’s argue on page 17, in the first paragraph of the amendment that Deker does not disclose performance data for common waypoints that are both in the original flight plan and a modified flight plan. However, in column 7, lines 5-18, and column 8, lines 13-19, Deker does disclose performance data for common waypoints that are both in the original flight plan and a modified flight plan.

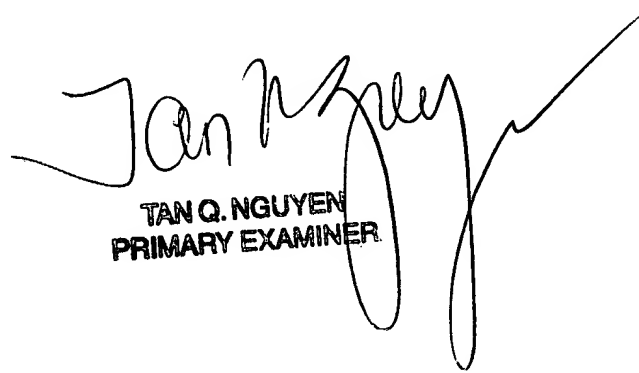
In last paragraph of page 17 of the amendment, applicant’s argue about a graphical display of the original flight plan and a modified flight plan are simultaneously presented on the display device together with the simultaneously textual display of the original flight plan and a modified flight plan. This has been disclose in Lions columns 11-13, lines 38-42, and column 10, lines 43-47, and figure 7, the dot line is “the tentative new navigation route” (see Lions, column 12, lines 27-32), that implies the modified flight plan, and waypoint from MANNG to VERRO is original flight plan display graphically, under the MANNG or VERRO is the number indicated desired aircraft air speed, altitude (column 10, lines 44-47), this implies the textual display. Therefore, Lions discloses a graphical display of the original flight plan and a modified flight plan are simultaneously presented on the display device together with the simultaneously textual display of the original flight plan and a modified flight plan.

Art Unit: 3661

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dalena Tran whose telephone number is 703-308-8223. The examiner can normally be reached on M-F (7:30 AM-5:30PM), off every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Cuchlinski can be reached on 703-308-3873. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7687 for regular communications and 703-305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

  
TAN Q. NGUYEN  
PRIMARY EXAMINER

/dt  
November 15, 2002